

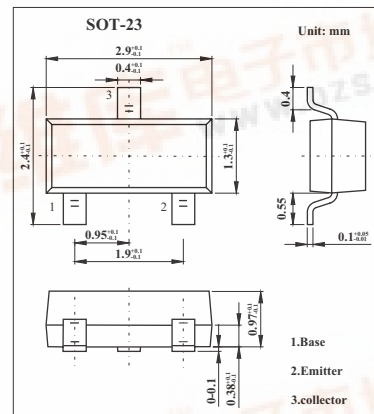
SMD Type Transistors

NPN Transistors

KST9014

■ Features

- Excellent hFE linearity
- Collector Current :Ic=0.1A



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	45	V
Emitter-Base Voltage	V <sub>EB0</sub>	5	V
Collector Current -Continuous	I <sub>c</sub>	0.1	A
Collector Power Dissipation	P <sub>c</sub>	0.2	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to 150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> =100uA, I <sub>E</sub> =0	50			V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>c</sub> =1mA, I <sub>B</sub> =0	45			V
Emitter-base Breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> =100 μ A, I <sub>c</sub> =0	5			V
Collector cutoff current	I <sub>CB0</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0			0.1	μ A
Emitter cutoff current	I <sub>EB0</sub>	V <sub>EB</sub> =5V, I <sub>c</sub> =0			0.1	μ A
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>c</sub> =1mA	200		1000	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =100mA, I <sub>B</sub> =10mA			0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =100mA, I <sub>B</sub> =10mA			1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>c</sub> =10mA, f=30MHZ	150			MHZ

■ hFE Classification

Marking	J6	
	L	H
hFE	200 to 450	450 to 1000



KST9014

■ Typical Characteristics

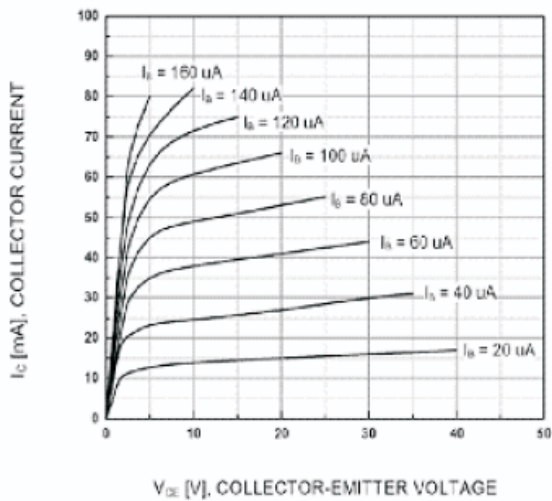


Fig.1 Static Characteristic

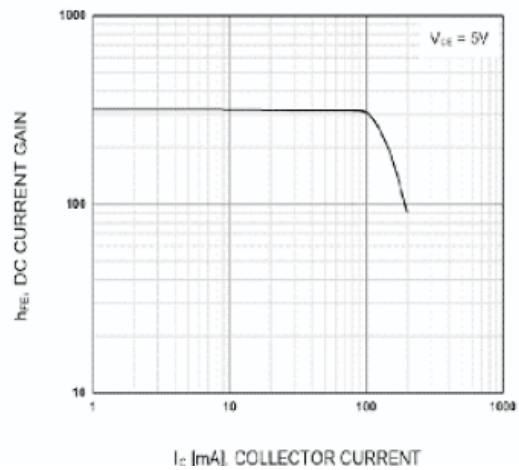


Fig.2 DC Current Gain

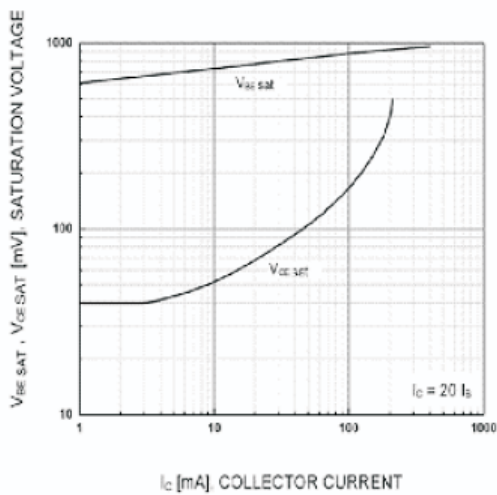


Fig.3 Base-Emitter Saturation Voltage  
Collector- Emitter Saturation Voltage

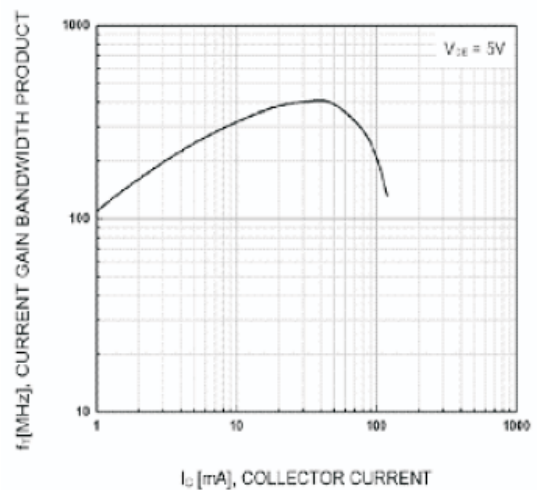


Fig. 4 Current Gain Bandwidth Product